
MOULDS INJURIOUS TO FOODS.

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The moulds include a number of exceedingly common saprophytes which make their appearance on various kinds of organic matter. They differ greatly in form, size and color and belong to widely separated orders. As a rule the vegetative state consists of filaments or hyphae which intertwine or interlace, giving rise to an arachnoid or felt-like mycelium. Many of these organisms, especially the common moulds, occasionally pass through a sexual reproductive stage, though more commonly reproduction is accomplished by means of nonsexual spores or conidia.

The various groups of moulds are widely distributed and grow very easily. When the spores are set free they are caught in currents of air and held suspended in the atmosphere to such an extent that in most living rooms hundreds of spores are floating around. The nonsexual spores are produced in such enormous numbers that whenever a proper food supply and proper environment are at hand an abundant crop of mould is developed.

Proper methods of checking or preventing the growth of moulds should receive serious attention, since these fungi form an important problem in the household, and also in the army where the preservation of bread and other articles of food for considerable periods of time is necessary.

The following are orders and families of fungi which contain species injurious in the household :

BACTERIALES—Coccaceae, Bacillaceae, Spirillaceae.

MUCORALES—Mucoraceae.

SACCHAROMYCETALES—Saccharomycetaceae.

ASPERGILLALES—Gymnoascaceae, Aspergillaceae.

MONILIALES—Mucedinaceae, Dematiaceae, Tuberculariaceae.

The following is a list of the more important moulds :

Mucoraceae.

Mucor stolonifer. Common bread mould. Grows on bread, cake, decaying fruit and vegetables.

Mucor mucedo. On fruits, bread, etc.

Mucor racemosus. On decaying vegetables, fruit, and bread.

Mucor spinosus. On moist bread and decaying vegetables.

Mucor rhizopodiformis. Not uncommon on moist bread.

Thamnidium elegans. On various articles, as bread, paste, etc.

Aspergillaceae.

Penicillum crustaceum. The most universal mould in the world. On decaying or preserved fruits, bread, pie, milk, potatoes, chocolate, etc.

Aspergillus herbariorum. A universal mould on bread, cheese, peach preserves, plum butter, mince meat, etc.

Aspergillus repens. Grows in the same substrata as *A. herbariorum*.

Aspergillus niger. On moist vegetables.

Mucedinaceae.

Oospora lactis. On milk and cheese.

Oospora fasciculata. On oranges.

Monilia fructigena. On peaches, plums, and cherries.

Trichothecium roseum. On various plant and animal products, fruits, vegetables, sweet potatoes, etc.
